

1 1. In a utility vehicle having a frame supported by a front steering axle with a
2 pair of front steered wheels mounted upon the front steering axle, a rear drive axle
3 with a pair of powered rear wheels mounted upon the rear drive axle, a middle
4 driven axle with a pair of driven middle wheels mounted on the middle driven axle,
5 and a longitudinally oriented bogey beam with the front steering axle attached at the
6 front end of the bogey beam and the middle driven axle attached at the rear end of
7 the bogey beam, and the bogey beam attached to the vehicle at and pivoting about
8 a pivot point between the front steering axle and the middle driven axle, the
9 improvement comprising:

10 a drive shaft interconnected with the front steered wheels and interconnected
11 with the middle driven axle and driving the front steered wheels from the middle
12 driven axle.

13 2. The vehicle of claim 1 wherein the drive shaft is enclosed within a hollow
14 bogey beam.

15 3. The vehicle of claim 1 further including a drive assembly interconnecting
16 the rear drive axle to the middle driven axle to transfer power from the rear drive
17 axle to the middle driven axle.

18 4. The vehicle of claim 1 further including a universal drive assembly
19 interconnecting the rear drive axle to the middle driven axle to transfer power from
20 the rear drive axle to the middle driven axle, wherein the universal drive assembly
21 comprises a universal joint connected to each of the middle driven axle and the rear
22 drive axle and an assembly with telescoping shafts interconnecting the two
23 universal joints.

1 5. A utility vehicle comprising:
2 a frame;
3 a front steering axle with a pair of front steered and driven wheels mounted
4 upon the front steering axle;
5 a rear drive axle with a pair of driven rear wheels mounted upon the rear
6 drive axle;
7 a middle driven axle with a pair of driven middle wheels mounted on the
8 middle driven axle;
9 a longitudinally oriented bogey beam with the front steering axle attached at
10 the front end of the bogey beam and the middle driven axle attached at the rear end
11 of the bogey beam, and the bogey beam attached to the vehicle at and pivoting
12 about a pivot point between the front steering axle and the middle driven axle; and
13 a drive shaft interconnected with the front steered wheels and interconnected
14 with the middle driven axle and driving the front steered wheels from the middle
15 driven axle.
16 6. The vehicle of claim 5 wherein the drive shaft is enclosed within a hollow
17 bogey beam.
18 7. The vehicle of claim 5 further including a drive assembly interconnecting
19 the rear drive axle to the middle driven axle to transfer power from the rear drive
20 axle to the middle driven axle.
21 8. The vehicle of claim 5 further including a universal drive assembly
22 interconnecting the rear drive axle to the middle driven axle to transfer power from
23 the rear drive axle to the middle driven axle, wherein the universal drive assembly

1 comprises a universal joint connected to each of the middle driven axle and the rear
2 drive axle and an assembly with telescoping shafts interconnecting the two
3 universal joints.

4 9. In a utility vehicle having a frame supported by a front steering axle with a
5 pair of front steered wheels mounted upon the front steering axle, a rear drive axle
6 with a pair of driven rear wheels mounted upon the rear drive axle, and a
7 longitudinally oriented bogey beam with the front steering axle attached at the front
8 end of the bogey beam and a resilient member attached at the rear end of the
9 bogey beam and to the vehicle, and the bogey beam attached to the vehicle at and
10 pivoting about a pivot point between the front steering axle and the resilient
11 member, the improvement comprising:

12 a drive shaft interconnected with the front steered wheels and interconnected
13 with the rear drive axle.

14 10. The vehicle of claim 9 wherein the drive shaft is enclosed within a hollow
15 bogey beam.

16 11. The vehicle of claim 9 wherein the resilient member is a suspension
17 strut.

18 12. The vehicle of claim 9 further including a drive assembly interconnecting
19 the rear drive axle to the drive shaft to transfer power from the rear drive axle to the
20 front steering axle.

21 13. The vehicle of claim 9 further including a universal drive assembly
22 interconnecting the rear drive axle to the drive shaft to transfer power from the rear
23 drive axle to the front steering axle, wherein the universal drive assembly comprises

1 a universal joint connected to each of the drive shaft and the rear drive axle and an
2 assembly with telescoping shafts interconnecting the two universal joints.

3 14. A utility vehicle comprising:

4 a frame;

5 a front steering axle with a pair of front steered and driven wheels mounted
6 upon the front steering axle;

7 a rear drive axle with a pair of driven rear wheels mounted upon the rear
8 drive axle;

9 a longitudinally oriented bogey beam with the front steering axle attached at
10 the front end of the bogey beam and a resilient member attached to the vehicle and
11 to the bogey beam at the rear end of the bogey beam, and the bogey beam
12 attached to the vehicle at and pivoting about a pivot point between the front steering
13 axle and the resilient member; and

14 a drive shaft interconnected with the front steered wheels and interconnected
15 with the rear drive axle and driving the front steered wheels from the rear drive axle.

16 15. The vehicle of claim 14 wherein the drive shaft is enclosed within a
17 hollow bogey beam.

18 16. The vehicle of claim 14 wherein the resilient member is a suspension
19 strut.

20 17. The vehicle of claim 14 further including a drive assembly
21 interconnecting the rear drive axle to the drive shaft to transfer power from the rear
22 drive axle to the front steering axle.

1 18. The vehicle of claim 14 further including a universal drive assembly
2 interconnecting the rear drive axle to the drive shaft to transfer power from the rear
3 drive axle to the front steering axle, wherein the universal drive assembly comprises
4 a universal joint connected to each of the drive shaft and the rear drive axle and an
5 assembly with telescoping shafts interconnecting the two universal joints.

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